

DC315 Now Offers 1-Hour Assemblies For Exterior Walls in Metal Buildings.

This new application is fully evaluated and listed with ICC-ES and verified on our ICC-ES-3702 evaluation report for USA & ICC-ESL-1577 for Canada.

When it comes to fire protection, nobody does it better than International Fireproof Technology. DC315 is the most tested and trusted name for code officials, architects and consumers when providing thermal and ignition barrier fire protection for spray foam insulation. DC315 reaches a new milestone and expands our uses to provide up to a 60-minute rating for steel building applications.

In Addition to being the most tested and approved 15-minute thermal barrier coating for SPF in the world, IFTI has yet again expanded the uses of our DC315 into hourly rated assemblies. Due to our superior fire performance, we have recently completed and passed testing that validates DC315 and 4" of closed cell SPF applied to exterior wall assemblies in metal buildings can provide a 1 -hour rated wall assembly. This is a huge benefit when using DC315 as we are the only coating that has achieved this and expands the uses of SPF and DC315 to open new opportunities and markets. These assemblies have been approved and evaluated by ICC-ES and are now listed on our ICC-ES-3702 evaluation report for USA & ICC-ESL-1577 for Canada.

Prior to DC315 being able to provide this level of protection, the only option when using SPF in this type of assembly was to build a wood framed structure over the SPF. Once the structure is built you would need to consider and install all electrical and plumbing components into the wall assembly. Once that is completed you can then attach 5/8" type X gypsum. Once the gypsum is installed it would need to be taped, mudded, fire stopped and finished off.

Using DC315 in this type of application is a huge cost saving benefit and eliminates the need to build a wood structure, the use of 5/8" type X gypsum and having to finish off the electrical and plumbing components within the assembly.

When utilizing DC315 for this 1-hour assembly in metal buildings, you will be rating the assembly from the interior side of the exterior wall. There are specific requirements that need to be followed for this type of application.

- There needs to be 4” of closed cell SPF applied to the interior side of the exterior non load bearing wall. Currently we have completed this testing with the 3 foam manufacturers listed below with the specific blend of foam and application rate of DC315 for each.
- Approved SPF Manufacturer & Blend of SPF
- 4” of Carlisle SealTite Pro HFO Closed Cell SPF & 40 Mils WFT DC315
- 4” of Carlisle SealTite One Closed Cell SPF & 36 Mils WFT DC315
- 4” of Elastochem Insulthane Closed Cell & 36 Mils WFT DC315
- 4” of Genyk Boreal Nature Elite Closed Cell SPF & 36 Mils WFT DC315
- Once the foam is completely clean, cured and finished gassing you are now ready to start applying DC315. Make sure to have proper PPE, job work record, application documents, mending plates or medallions and wet film thickness gauge for measuring coating thickness.
- Make sure the ambient and environmental conditions are within our specification and monitored during installation and throughout the curing process which can be anywhere from 48-72 hours for curing, this can be directly affected by the ambient conditions. Monitoring the ambient conditions is very important for a successful application on any project when using DC315 or any fire protective coatings. Proper ambient air, substrate, coating temperatures, ventilation and low humidity are necessary for proper adhesion and curing.
- The application rate of DC315 to meet the assembly requirements is 36 Mils WFT (Wet Film Thickness). The application of DC315 would need to be applied in two coats, each coat applied at 18 mils WFT with a 2–4-hour cure time between coats. Once the full application of DC315 at 36 Mils WFT has been met, maintain ambient conditions and ventilation for full curing 48-72 hours. If this application is in an unconditioned space, it would require the use of a protective topcoat to protect the DC315 fire coating from moisture, condensation, and humidity. The protective topcoats can be found on page 29 section F of our DC315 submittal package within our master spec.

